

Elementary Science Partnership Series

A California Science Center NGSS Professional Development Opportunity

The California Science Center Foundation is offering an intensive, interactive partnership program that supports the implementation of Next Generation Science Standards (NGSS) for elementary schools. The program will help schools increase familiarity with the NGSS and provide a basis for planning instruction around the new standards in advance of upcoming assessments and state-wide realization.

California Science Center Program Deliverables

1. Administrator Overview & Needs Assessment

California Science Center staff will meet with school administration to provide a program overview and set goals and expectations for participating teachers. Science Center staff will conduct an onsite needs assessment, including a survey of curriculum, resources, teacher awareness of NGSS, and school-wide goals.

2. Professional Development & Coaching

The program includes three customized, six-hour sessions of professional development offered to each grade span (primary and upper), spread throughout the school year for a total of six days (three per grade span).

Day One

- > Introduction to NGSS architecture and instructional shifts to support implementation
- Hands-on exploration highlighting the three dimensions of the NGSS
- Grade-level coaching and dedicated planning time for teachers supported by Science Center educators

Day Two

- > Sample lesson sequence demonstrating lesson design and Common Core integration
- > Tools for designing units of study around NGSS and resources for unit components
- In-depth module on the use of Interactive Science Notebooks as a tool for student metacognition and assessment

Day Three

- > In-depth module on the Engineering Design Process and the integration of engineering into science curriculum
- Introduction to assessment design for NGSS
- Grade-level coaching and dedicated planning time for teachers supported by Science Center educators

3. Evaluation

The California Science Center will conduct an assessment of teacher progress in NGSS awareness and transition throughout the program.

4. Additional Opportunities

Occasionally, additional opportunities that support science learning may be offered based on funding availability. These may include bus funding for a field trip to the California Science Center, outreach programming for the school site, or free tickets to IMAX movies or special exhibits. These will be offered on a first-come, first-served basis and may be limited by scheduling and/or funds available.



The long-term and customizable nature of this program necessitates a deep partnership between the partner school and the California Science Center. As a partner in that relationship, the school agrees to commit to the following:

1. Program Costs

The base fee for the program is \$15,000 per school. The school is responsible for either securing and funding substitute teachers during professional development that takes place during instructional days or paying teachers for training time that takes place outside of instructional days.

2. Administrative Support and Training

The school will identify at least two members of the administration to participate in the administrator overview, needs assessment, and be responsible for school-wide communications between the California Science Center and teacher participants.

3. Grade Level Science Leads

The school will identify and support science leads for each grade level who will be the main contact for California Science Center staff outside of training days.

4. Evaluation

The school will participate in and provide data to support ongoing evaluation to assess the progress and impact of the program, and commit to enabling data collection from participants.

Testimonials

"It was an awesome year filled with numerous opportunities to learn to incorporate science, engineering, math, and technology, through these intense trainings. We learned and practiced using many resources to utilize in the classroom to make these subjects fun and engaging for our students."

"I have always been hesitant about teaching science, but this PD definitely empowered me to teach it next year and from this point on."

"Excellent training ... my students have really enjoyed the hands on part. They are struggling readers and they feel more confident and are rather successful with hands on activities that allow them to ask questions and carry out investigations."

"I really appreciate this training because we have all been in the dark about the NGSS. I personally tried to learn on my own, but I was so confused. This training was very informative, hands-on, well-led, and tons of fun!"

For additional information, please contact:

Elena Lopez, Manager of Professional Development pdinfo@cscmail.org
213-744-2036